# Interactive Trail *Draft 4*

The trail begins at the Ela Sanctuary Information Station

***Answer all questions in your notebook.***

## Exercise 4

Station 2

## *Pondering Ponds*

**Part 1**

*Carefully* and *quietly* walk to edge of the pond.

1. Sit quietly, without moving or talking for about three minutes. Your advisor will keep track of the time. Remember to use you sense of **sight, hearing, touch and smell**.
2. List the sounds you heard.
3. What smells did you notice? *(Questions 3-6 5-2.33)*
4. Did you feel the wind on your face?
5. Did you see any animals? (insects, birds, butterflies, frogs)
6. Use the Plant Identification Guide to identify the three most common plants found near the edge of the pond and tell why these plants are important to the balance of nature. *(4-3.12, 5-3.11)*

**Part 2**

1. Record the temperature of the water *and* the temperature of the air. (Leave the thermometer in the water for at least two minutes before you record the temperature.)
2. Compare the air temperature with the water temperature. *(4-1.02, 5-1.05)*
3. Is there a difference between the water temperature and air temperature? *(4-1.04, 5-1.07)*
4. Why do you think there is a difference in temperature?
5. Use your **sling psychrometer** and relative humidity (RH) chart to determine the relative humidity near the pond. *(4-1.02, 5-1.05)*
6. Take the relative humidity measurement at some other location that is at least 100 yards from a pond or stream. *(4-1.02, 5-1.05)*
7. Compare the relative humidity near the pond with the relative humidity that is not near a pond or stream. Why is there a difference in the relative humidity at the two locations? *(4-1.04 5-1.07)*

**Part 3**

1. Take a small water sample.
2. Describe any signs of life you see in the sample. Use your magnifying glass to look closely.
3. Describe any nonliving **sediment** you see in the sample. Use your magnifying glass to look closely.
4. Determine the **oxygen content** of the pond water by following the directions in the Oxygen Test Kit. *(4-1.02, 5-1.05)*

5. Explain why the oxygen content in water is important.
6. Tell what will happen if too little oxygen is present in a pond.
7. Measure the pH of the water. The pH of less than 7 will indicate that the water is an acid and a pH of greater than seven indicates that the water is a base. Record the pH of the pond. If you lived in an area of high pollution you may have found the pond to be low in pH because it had been polluted by acid rain.

**Part 4**

1. Use a **dip net** to collect a sample of animal life that may be living in the pond. Tape your net handle to a stick to put the net out as far as possible from the shore. *Not everyone will be lucky enough to get a sample of living things in their net so share what you may find with others.* Make a sketch of anything you find. *(4-1.02, 5-1.05)*
2. Try to identify what you have found using the Pond Life Guide.
3. Make a sketch of what you found.
4. Describe how the specimens you found in the water are important to the balance of nature?
5. Be very gentle with anything you find and return it to the pond when you are through.
6. Go to your next station or follow the instructions of you teacher.
7. Remember to look for clues or signs of wildlife along the way.

 If you are working on Weather Watchers, Exercise 1, take a second weather observation here.